

## WHAT IS CLAIMED IS:

1. A method for attracting flying insects to a locus for the purpose of trapping or killing them, which comprises releasing in the vicinity of the locus at least one chemical attractant for the insects including carbon dioxide, by reacting with water or other aqueous medium or other aqueous medium, a mixture which has previously been maintained in a substantially oxygen-free environment and which comprises the following ingredients, namely, (a) at least one substrate and (b) at least one microorganism, which ingredients have the ability to interact with each other, either aerobically or anaerobically, or both, in presence of water or other aqueous medium, so as to generate said at least one chemical attractant.
2. A method according to claim 1, which is further characterized by at least one of the following features:
  - (i) said at least one chemical attractant includes at least carbon dioxide, acetone and lactic acid;
  - (ii) said at least one substrate (a) comprises or consists of at least one sugar, and said at least one microorganism (b) comprises or consists of at least one yeast;
  - (iii) said mixture is supported on an inert carrier;
  - (iv) said mixture comprises additionally at least one added ingredient selected from antifoam, lactic acid and its salts, peptones, Jack Bean powder, yeast extracts, vitamin B2, phenylalanine and its salts, lysine and its salts, urea, and ammonium salts;
  - (v) said mixture includes at least one additional component selected from the group consisting of insecticides and pathogens for the insects;
  - (vi) said mixture is maintained in a substantially oxygen-free environment by vacuum or by contact with an inert gas environment;
  - (vii) said mixture is such that said at least one chemical attractant for the insects includes chemical attractants which are effective independently of the carbon dioxide;
  - (viii) the insects comprise mosquitoes;
  - (ix) said substantially oxygen-free environment is an essentially air-proof sealed package.

3. A method for attracting flying insects to a locus for the purpose of trapping or killing them, which comprises releasing in the vicinity of said locus at least one chemical attractant for the insects including carbon dioxide, by reacting with water or other aqueous medium or other aqueous medium, a mixture which has previously been maintained in a substantially oxygen-free environment and which comprises the following ingredients, namely, (a) at least one substrate and (b) at least one microorganism, which ingredients have the ability to interact with each other, either aerobically or anaerobically, or both, in presence of water or other aqueous medium, so as to generate said at least one chemical attractant; and wherein the locus includes also at least one further attractant for the insects selected from chemical attractants other than those formed by said reaction with water or other aqueous medium, and physical attractants selected from heat, moisture, visible light, invisible electromagnetic radiation, optical shapes, color patterns, bodies or surfaces in motion, and any combinations thereof.

4. A method according to claim 3, which is further characterized by at least one of the following features:

- (i) said at least one chemical attractant includes at least carbon dioxide, acetone and lactic acid;
- (ii) said at least one substrate (a) comprises or consists of at least one sugar, and said at least one microorganism (b) comprises or consists of at least one yeast;
- (iii) said mixture is supported on an inert carrier;
- (iv) said mixture comprises additionally at least one added ingredient selected from antifoam, lactic acid and its salts, peptones, Jack Bean powder, yeast extracts, vitamin B2, phenylalanine and its salts, lysine and its salts, urea, and ammonium salts;
- (v) said mixture includes at least one additional component selected from the group consisting of insecticides and pathogens for the insects;
- (vi) said mixture is maintained in a substantially oxygen-free environment by vacuum or by contact with an inert gas environment;

- (vii) said mixture is such that said at least one chemical attractant for the insects includes chemical attractants which are effective independently of the carbon dioxide;
- (viii) the insects comprise mosquitoes;
- (ix) said substantially oxygen-free environment is an essentially air-proof sealed package.

5. An essentially air-proof sealed package containing a mixture, substantially free of contact with oxygen, comprising ingredients which have the ability to interact with each other, either aerobically or anaerobically, or both, in presence of water or other aqueous medium, so as to generate at least one chemical attractant for insects including carbon dioxide, said mixture comprising (a) at least one substrate and (b) at least one microorganism.

6. A package according to claim 5, which is further characterized by at least one of the following features:

- (i) said at least one chemical attractant includes at least carbon dioxide, acetone and lactic acid;
- (ii) said at least one substrate (a) comprises or consists of at least one sugar, and said at least one microorganism (b) comprises or consists of at least one yeast;
- (iii) said mixture is supported on an inert carrier;
- (iv) said mixture comprises additionally at least one added ingredient selected from antifoam, lactic acid and its salts, peptones, Jack Bean powder, yeast extracts, vitamin B2, phenylalanine and its salts, lysine and its salts, urea, and ammonium salts;
- (v) said mixture includes at least one additional component selected from the group consisting of insecticides and pathogens for the insects;
- (vi) said mixture is maintained in a substantially oxygen-free environment by vacuum or by contact with an inert gas environment;
- (vii) said mixture is such that said at least one chemical attractant for the insects includes chemical attractants which are effective independently of the carbon dioxide.

7. A mixture substantially free of contact with oxygen, comprising ingredients which have the ability to interact with each other, either aerobically or anaerobically, or both, in presence of water or other aqueous medium, so as to generate at least one chemical attractant for insects including carbon dioxide, said mixture comprising (a) at least one substrate and (b) at least one microorganism.

8. A mixture according to claim 7, which is further characterized by at least one of the following features:

- (i) said at least one chemical attractant includes at least carbon dioxide, acetone and lactic acid;
- (ii) said at least one substrate (a) comprises or consists of at least one sugar, and said at least one microorganism (b) comprises or consists of at least one yeast;
- (iii) said mixture is supported on an inert carrier;
- (iv) said mixture comprises additionally at least one added ingredient selected from antifoam, lactic acid and its salts, peptones, Jack Bean powder, yeast extracts, vitamin B2, phenylalanine and its salts, lysine and its salts, urea, and ammonium salts;
- (v) said mixture includes at least one additional component selected from the group consisting of insecticides and pathogens for the insects;
- (vi) said mixture is maintained in a substantially oxygen-free environment by vacuum or by contact with an inert gas environment;
- (vii) said mixture is such that said at least one chemical attractant for the insects includes chemical attractants which are effective independently of the carbon dioxide.